

**REMARKS**

This is a response to the Office Action mailed February 3, 2004. Claims 1-11 and 29-40 are pending. Claims 1, 6, 9, and 34 have been amended. Reconsideration and allowance of the instant application are respectfully requested.

The indication that claims 3, 7, 8, 32, and 33 contain allowable subject matter is appreciated.

Claims 1, 6, 9, and 34 have been amended to recite unidirectional glass filaments and to recite that each panel comprise sections that individually do not extend the entire longitudinal length of the vertical panel and wherein ends of the sections abut against each other. Support for the amendments can be found on page 10, lines 6-14, and page 15, lines 4-6.

Claims 1, 2, 4, 5, 10, 11, 29-31, and 34-40 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 4,078,348 issued to Rothman.

Rothman does not teach each and every element of the claimed invention and cannot anticipate the instant claims. Rothman describes construction panels comprising a core of expanded or foamed polymeric material. The panels comprise two major face members comprised of resin and *multidirectional* glass fibers. The glass fibers may be applied to the resin by spraying, for example. Alternatively, glass mats may be impregnated with the resin. See column 10, lines 25+ which describes how the panels are made by molding resin with glass fibers.

It is important to Rothman that the glass fibers are in a multidirectional orientation in order to promote attachment to the foam core. That is, the foam material and glass-fibers are used to create a bond to provide some strength. (See column 9, lines 34-40). Thus, one skilled in the art would not have simply substituted a pultruded product for the panels required by Rothman.

Rothman does not teach or suggest pultruded panels having unidirectional glass filaments. In fact, Rothman quite clearly makes the distinction between *pultruded* angle

members and reinforcing members made with continuous strands of glass fibers in a *unidirectional* orientation and panel face members made with *resin* and *multidirectional* fibers. Nowhere does Rothman teach or suggest panels made with unidirectional filaments, nor is there any reason to modify Rothman to use unidirectional fibers absent the hindsight of the instant claims.

The end product of Rothman is not the same end product of the instant claims. Rothman's discloses a construction panel for above ground buildings with a core of foamed polymeric material between face members. The foam material and glass-fibers are used to create a bond to provide some strength. In the claimed panels, the pultruded construction achieves strength and stiffness without the need of foam insulation.

Rothman does not teach or suggest using pultruded prefabricated panels, which include pultruded opposing planar sheets attached to pultruded support members. Nor does Rothman teach or suggest the use of unidirectional filaments in pultruded prefabricated panels. Withdrawal of this rejection is requested.

Claims 1, 2, 4-6, 10, 11, 31, and 34-36 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,979,684 issued to Ohnishi.

Ohnishi is directed to a cargo container comprising integrally formed FRP panels. Ohnishi does not teach or suggest an underground vault in accordance with the instant claim.

It is important in Ohnishi to provide a cargo container wherein the sides are a single unit, and in fact, preferably, two sides, a side and the top, or the side and the bottom are formed integrally. See figures 4 and 10, for example. This is important to achieve the desired strength of the container.

The claimed invention, on the other hand, has panels that are made up of sections. This allows a larger vault to be created. A seam is formed between connecting panel sections. Ohnishi does not teach or suggest using multiple sections in accordance with the instant claims and thus cannot anticipate the instant claims. Withdrawal of the instant rejection is requested.

Claims 1, 2, 4-6, 10, 11, 31, and 34-36 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 3,783,563 issued to Moore.

Moore is directed to prefabricated buildings using panel and connector modules formed of molded resins with glass fiber. Moore uses hollow panels which are filled with a substantially rigid material to prevent deflection of the panel and to add strength and rigidity to the panel. In other words, the panels do not, by themselves, provide sufficient strength to the building without the rigid material. Moore does not teach or suggest pultruded panels or panels containing unidirectional filaments.

The vault construction of the instant claim utilizes pultruded panels comprising sheets and supports therebetween. In contrast to the molded panels of Moore, the panels prepared by pultrusion are sufficiently strong and do not require a rigid material to fill the hollow spaces between sheets.

Moore does not teach or suggest preparing panels by pultrusion or panels containing unidirectional filaments. Moreover, based on Moore, one skilled in the art would believe a rigid material is necessary for strength and support. Withdrawal of the instant rejection is requested.

Claims 6, 7, 9, and 32 stand rejected under 35 USC 103(a) over Rothman in view of Beckerman or Ohnashi. Rothman does not teach the instant claims for the reasons identified above. Rothman requires multidirectional fibers. Even if one skilled in the art used aramid or graphite fibers, one still does not arrive at the claimed unidirectional filaments of the instant claims. Moreover, none of Beckerman or Ohnashi describes panels made up of sections as claimed. Withdrawal of the instant rejection is requested.

Claims 9, 29, 30 and 37-39 stand rejected under 35 USC 103(a) over Ohnashi in view of Rothman. Contrary to the position taken by the Office Action, Rothman does not teach or suggest panels produced with unidirectional fibers. In fact Rothman distinguishes between *pultruded* angle members and reinforcing members made with continuous strands of glass fibers in a *unidirectional* orientation and panel face members made with *resin* and *multidirectional*

fibers. Thus, Rothman does not remedy the defects of Ohnishi as alleged. Withdrawal of the instant rejection is requested.

Claims 6 stands rejected under 35 USC 103(a) over Moore in view of Beckerman or Ohnashi. Moore does not teach the instant claims for the reasons identified above. Moore does not teach or suggest preparing panels by pultrusion or panels containing unidirectional filaments. Even if one skilled in the art used aramid or graphite fibers, one still does not arrive at the claimed unidirectional filaments of the instant claims. Moreover, none of Beckerman or Ohnashi describes panels made up of sections as claimed. Withdrawal of the instant rejection is requested.

Claims 9 stands rejected under 35 USC 103(a) over Moore in view of Beckerman or Ohnashi, and further in view of Rothman.

Moore does not teach the instant claims for the reasons identified above. Moore does not teach or suggest preparing panels by pultrusion or panels containing unidirectional filaments. Even if one skilled in the art used aramid or graphite fibers, one still does not arrive at the claimed unidirectional filaments of the instant claims. Moreover, none of Beckerman or Ohnashi describes panels made up of sections as claimed.

Contrary to the position taken by the Office Action, Rothman does not teach or suggest panels produced with unidirectional fibers. In fact Rothman distinguishes between *pultruded* angle members and reinforcing members made with continuous strands of glass fibers in a *unidirectional* orientation and panel face members made with *resin* and *multidirectional* fibers. Thus, Rothman does not remedy the defects of Moore as alleged. Withdrawal of the instant rejection is requested.

Claims 37-39 stand rejected under 35 USC 103(a) over Moore in view of Rothman. Moore does not teach the instant claims for the reasons identified above. Moore does not teach or suggest preparing panels by pultrusion or panels containing unidirectional filaments. Moreover,

contrary to the position taken by the Office Action, Rothman does not teach or suggest panels produced with unidirectional fibers. In fact Rothman distinguishes between *pultruded* angle members and reinforcing members made with continuous strands of glass fibers in a *unidirectional* orientation and panel face members made with *resin* and *multidirectional* fibers. Thus, Rothman does not remedy the defects of Moore as alleged. Withdrawal of the instant rejection is requested

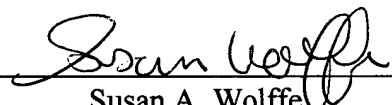
**CONCLUSION**

For the foregoing reasons, it is respectfully submitted that this application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in better form for allowance, the Examiner is respectfully urged to contact Applicants' undersigned representative at the below-listed number. If any additional fees are required or if an overpayment has been made the Commissioner is authorized to charge or credit Deposit Account No. 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: June 3, 2004

By:   
Susan A. Wolfe  
Registration No. 33,568

1001 G Street, N.W.  
Eleventh Floor  
Washington, D.C. 20001-4597  
(202) 824-3000